their downloading speeds or establishing proprietary technical protocols for the @Home and Road Runner services.

In sum, as the "first mover" in the Internet broadband marketplace, AT&T possesses an advantage that has proven highly valuable. If AT&T is allowed to build on this "first mover" advantage, a significant risk exists that its closed access model could change the fundamental nature of the Internet from an open, peering model to a closed model far more closely akin to traditional cable. This conversion of the open Internet to a closed model, with AT&T as the gatekeeper, would be plainly contrary to the interests of competition, unaffiliated providers, and consumers.

V. COMPETITIVE CONCERNS ARE PARTICULARLY ACUTE GIVEN THE MARKET-DISTORTING EFFECTS OF THE DISPARATE REGULATORY TREATMENT OF AT&T AND ILEC SERVICES

SBC supports the rollout of advanced services in a manner that ensures deployment to all consumers.[120] However, this goal will be successfully achieved only if the market for advanced services is competitive and robust. The disparate regulatory treatment of AT&T's and ILECs' broadband services is unwarranted and will only serve to exacerbate and perpetuate the competitive harms described above and, thereby, severely undermine consumer welfare. Rather than create asymmetric schemes that will ultimately limit consumers' choice of service providers and increase the prices they pay for advanced telecommunications services, the Commission must act swiftly to level the playing field – either by denying the merger or, at a minimum,

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120 *See* 47 U.S.C. § 706.

conditioning the merger's approval upon AT&T's agreement to open its broadband "pipes" to competitors.

AT&T seeks to run a closed system while escaping effective regulatory control in virtually every aspect of its businesses. In contrast, ILECs who offer the same services – be they local or long distance voice services or high-speed data capabilities – will continue to be forced into a regulatory briar patch, one that exacts an exorbitant price in dollars and delay before services are delivered to consumers. For example, while ILECs are required to provide interconnection to their networks at any technically feasible point,[121] AT&T post-merger will be free of these costly and cumbersome obligations. Similarly, while ILECs must unbundle the elements of their networks for competitors,[122] offer services for resale at wholesale rates,[123] provide equal access to their networks[124] and offer collocation of competitor equipment,[125] it appears that none of these requirements will apply to AT&T after the merger. Nor will AT&T be bound by the provisions of Sections 271 and 272 of the Act, or the rules governing open network architecture and CEI.

The stated rationale for the costly regulatory burdens imposed on ILECs is that they are necessary to provide an opportunity for competitors to penetrate the local telephone and advanced data services markets. AT&T itself has long supported the "market opening"

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121 47 U.S.C. § 251(b)(2)(B).

122 47 U.S.C. § 251(c)(3).

123 47 U.S.C. § 251(c)(4).

124 47 U.S.C. § 251(b)(4).

125 47 U.S.C. § 251(c)(6).

provisions of the Act, as well as other measures that have been touted as providing competitors a lever to open access to ILEC networks.[126] It has taken advantage of every opportunity to caution the Commission regarding the likely harmful effects of creating "bottleneck[s] . . . with respect to providing advanced services, which are provided over [the] same loops" as telephony and other services.[127] And as recently as last month, AT&T opposed even the sweeping market-opening conditions that accompanied the merger of SBC and Ameritech because, in its estimation, the conditions do not go nearly far enough to ensure open access to the SBC and Ameritech networks.[128]

Yet, as AT&T hopes to complete a merger that will deliver it bottleneck control over a broadband pipe into the home, its perspective has changed dramatically. Regulation that would

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126 *See Statement of James W. Cicconi, Senior Vice President for Government Affairs and Federal Policy, "AT&T Reaction to Supreme Court Ruling Upholding FCC Authority on Establishing Guidelines for Competition,"* (Jan. 26, 1999) <http://techlawjournal.com/courts/attviowa/19990126.html> ("AT&T is delighted the Court has confirmed that the Telecom Act established a national policy in support of local competition. It's especially good news the Court upheld the FCC's rules prohibiting local monopolies from misusing their control of network elements to inhibit competitors from entering the local market.").

127 Comments of AT&T Corp., CC Docket No. 98-26, at 9 (April 6, 1998); "[T]he high-speed access connection to the home . . . at issue here is entirely capable of carrying *all* of a customer's traffic, including voice. Once a home . . . purchases such access connections, there is no need for it to maintain a separate POTS line . . . . Consequently, the local carrier who wins the customer's 'Internet' business will also win its local voice business. Thus, it will effectively preclude the development of local competition . . . .". *Id.* at 6.

128 *See* Comments of AT&T Corp. on the Proposed SBC-Ameritech Merger Conditions, CC Docket 98-141, at 1 (July 19, 1999) ("[The proposed conditions] do not address in any meaningful fashion the serious competitive concerns which demonstrated that the merger as originally proposed would be anticompetitive and would fail the statutory public interest test. Nor do the Conditions mitigate those concerns by making Applicants' markets more open in any other, independent respect.").

guarantee open access to *its* loop architecture is inherently bad, AT&T hypocritically claims – wholly ignoring the fact that it will occupy comparable incumbent status as a cable monopolist and its service territories and associated interests will be broader in scope than any existing ILEC enterprise. Notwithstanding the time and effort AT&T has expended seeking to subject SBC and other ILECs to ever more stringent open network requirements, claiming time and again that such efforts were necessary to protect the interests of competitors and consumers,[129] there is no basis for the distinctions that AT&T seeks to create, and the public interest will suffer if they are maintained.

SBC has consistently encouraged the Commission to take an even-handed approach to regulation in the deployment of advanced services rather than select "winners" and "losers" in what amounts to little more than government-sponsored industrial planning.[130] The obligations imposed solely on ILECs are by themselves a substantial impediment to deployment of advanced services, and that impediment is exacerbated by the asymmetrical treatment of their already advantaged largest competitor, AT&T.

The Commission itself has recognized that regulation has the potential to create disincentives to investment in the advanced services market.[131] This is even more true of disparate regulation of competing technologies. In particular, by artificially raising the costs of one technology, such regulatory handicapping creates the potential for an inefficient rival

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[129] *See id.* at 54-70.

[130] *See generally* Comments of SBC Communications Inc., CC Docket 98-146 (Sept. 14, 1998).

[131] *See Deployment of Advanced Telecommunications Capability,* 13 FCC Rcd 24011, 24043-45, 24047-50 (1998).

technology to best its competition in the market without regard to individual merit. At no time has AT&T explained how the benefits of a competitive market for advanced services can be realized in the absence of parity in regulatory treatment. While AT&T claims that its merger will bring benefits to consumers by spurring competition from ILECs in the advanced services market, it is at the very same time seeking to hamstring ILECs through the imposition of regulations that will raise ILEC costs and inhibit ILEC entry. The paradox is irresolvable, and AT&T can not defend such conflicting positions.

To the extent existing legal requirements limit the Commission's ability to deregulate all providers consistently, the public interest demands as a minimum that they be accorded symmetrical obligations. By permitting one incumbent provider of advanced services to operate free of virtually any regulatory constraints, much less the excessive burdens placed on the ILECs, the Commission will effectively prevent consumers from reaping the benefits of full and fair competition, including a broader array of services and lower prices. The reasons are clear: laboring under the costs associated with regulatory compliance and the disabilities tied to providing competitors cheap access to their services, the ILECs will be less effective competitors in the marketplace.

It cannot be the case that the public interest countenances, much less demands, such disparate treatment of comparably situated entities. The adverse impact on consumers caused by these regulatory disparities will increase both the risk of anticompetitive market power and the harm to the public from its exercise in each of the markets addressed above. The Commission may not, in the public interest, perpetuate such a situation, much less aggravate it as sought by AT&T here.

VI. AT&T HAS FAILED TO DEMONSTRATE THAT ANY SIGNIFICANT PUBLIC INTEREST BENEFITS WILL ARISE FROM THE MERGER

Contrary to the impression left by the Application, this transaction is not about local telephone service, but rather about exploiting dominion over a broadband pipeline into homes in order to exert market power over video, Internet, and related offerings. Accordingly, the merger should be denied on that ground alone. But, even if the Commission were to seek to examine AT&T's claimed local telephone competition benefits, it would find those claims to be neither substantial nor credible. As such, they may not be considered in the Commission's public interest analysis.

Under *Bell Atlantic/NYNEX*, claimed benefits must be shown to be "likely and verifiable." Moreover, "[a]s the harms to the public interest becomes greater and more certain, the degree and certainty of the public interest benefits must also increase commensurately in order for [the Commission] to find that the transaction on balance serves the public interest, convenience and necessity."[132] As shown below, AT&T has not even come close to meeting these standards.

AT&T's primary assertion of public interest benefits is predicated upon purported gains in the local telephony market.[133] But, AT&T has provided no evidence or other reliable indications that this benefit will be realized. There are no service commitments contained in the application, no implementation schedules, and no investment plans. Absent such a showing, the Commission and the public can have no assurance that AT&T's claims have any substance.

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[132] *Bell Atlantic/NYNEX Order*, 12 FCC Rcd at 20063; *MCI/WorldCom Order*, 13 FCC Rcd at 18137.

[133] Application at 20-28.

Just as in its acquisition of TCI, AT&T apparently believes it may proceed on a "trust us" basis – wholly disregarding the incongruity of such a perception in light of the staff's recent negotiation of detailed performance requirements with SBC/Ameritech notwithstanding already existing substantiation in the record of that merger's enormous public benefits.[134] In fact, there is no reason to "trust" AT&T, as it has yet to fulfill even its prior promise regarding establishment of an open broadband system. To obtain approval of its merger with TCI, AT&T explained to the FCC that its customers "do not have to 'go through' @Home or view any @Home-provided content or screens."[135] In approving that merger, the FCC explicitly relied upon this commitment to openness, stating that: "We take this representation seriously [and] will monitor broadband deployment closely."[136] AT&T has not, of course, lived up to this commitment. It follows that, given AT&T's slippery rhetoric and the lack of any independently verifiable benefits, AT&T's claimed efficiencies should be discounted as vague and speculative and, therefore, not creditable.

The speculative and illusory nature of the claimed benefits is highlighted by the fact that both AT&T and MediaOne – without the merger – were committed to deployment of local telephony service throughout their respective systems.[137] MediaOne already boasts

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134 *See Pleading Cycle Established For Comments on Conditions Proposed by SBC Communications Inc. and Ameritech Corporation For Their Pending Applications to Transfer Control,* DA 99-1305, CC Docket No. 98-141 (July 1, 1999).

135 *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Tele-Communications, Inc., Transferor, to AT&T Corp., Transferee,* 14 FCC Rcd 3160, 3206 (1999).

136 *Id.* at 3207.

137 *See Comments of AT&T Corp.*, CS Docket No. 99-230, at 22-24 (Aug. 4, 1999); *Comments of MediaOne Group, Inc.*, CS Docket No. 99-230, at 15-16 (Aug. 6, 1999).

approximately 26,000 subscribers,[138] and typical penetration rates of 7-8 percent,[139] with some as high as 24 percent in its earlier trials.[140] In addition, MediaOne previously allocated $4.1 billion for network system upgrades,[141] which are due to be completed by the end of 2000.[142] AT&T cannot claim that these "benefits" are attributable to the proposed transaction.[143]

In apparent recognition of the insufficiency of its local telephony showing, AT&T attempts to augment its public interest statement with sparse and unsupported claims of benefits in other markets.[144] For example, AT&T asserts that the roll out of cable telephony will speed the deployment of Internet services and, thereby, spur competitors to invest in their networks. But, as set out above, there is no evidence or commitment from AT&T that the merger would increase deployment of cable telephony over what AT&T and MediaOne already have planned.

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138 *See* Application at 23.

139 Mike Farrell, *Boston Hot for Telco Competition,* Multichannel Online News (March 8, 1999) < http://www.multichannel.com/digest.shtml>.

140 *MediaOne Investor Handbook,* at 18 <http://www.mediaonegroup.com/investorinfo/publicationsframe.html>. Undoubtedly, this success can be attributed to MediaOne's IP telephony experience internationally, where it has enjoyed penetration rates of 32 percent in the UK. *Id.*

141 Application at 23.

142 *Id.* at 23, n.60.

143 AT&T's attempt to belittle MediaOne's accomplishments by touting the advantages of IP telephony over circuit-switched offerings fails in view of AT&T's own deployment of the latter and the absence of any showing that either AT&T's or MediaOne's conversion to digital technology will be accelerated in any appreciable and certain way by the merger. *See* Application at 25.

144 AT&T only devotes a total of two and a half pages to these other markets. *See* Application at 28-31.

It follows that any corresponding Internet deployment efforts would be similarly untethered to this transaction.[145]

AT&T's threat not to invest in local telephone competition is simply not credible.[146] AT&T has already paid a $40 billion premium for TCI. To earn the revenues that would justify that premium, AT&T *must* invest in local telephone competition. If AT&T were to announce that it was abandoning its plan, its stock price assuredly would decrease substantially almost immediately. In other words, AT&T must press forward with its investment in local telephone competition or else receive a severe punishment at the hands of the stock market, which would cost AT&T's shareholders the premium that they have already paid for TCI.

AT&T's claim to generating pro-competitive incentives for other broadband providers is similarly baseless. In fact, AT&T is actively working through the regulatory process to promote requirements such as below cost TELRIC pricing that will discourage investment and handicap

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145 MediaOne concedes that one digital upgrade covers all services:

> It costs approximately $400 per home passed to upgrade the network to 750 MHz. This basic upgrade makes the network ready to carry two-way services, including advanced video, high-speed data and telephone services. Once the network has been upgraded, most of the other costs associated with new products are revenue-led. In other words, you don't need to install customer premises equipment (CPE) until the customer signs up for the service and starts generating revenue.

1998 MediaOne Investor Handbook, at 11 <http://www.mediaonegroup.com/investorinfo/publicationsframe.html>.

146 Appendix A, Hausman Declaration, ¶ 36.

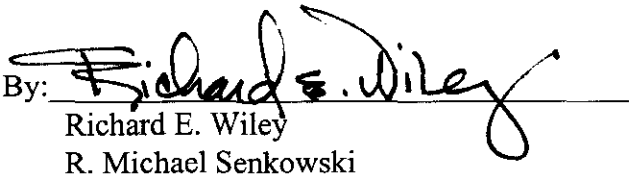
the potential ILEC competitors it claims to be spurring.[147] Thus, AT&T has shown no material benefits to the Internet marketplace, only harms.

VII. CONCLUSION

In view of the foregoing, the record shows that the proposed AT&T/MediaOne merger would impede competition in numerous product markets with no countervailing benefits. The public would not only suffer higher costs and be denied choices in the selection of alternative providers, but also face the prospect of irreversible damage to the open framework of the Internet. Accordingly, the merger applications must be denied.

Respectfully submitted,

SBC COMMUNICATIONS INC.

By: 

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147 Appendix A, Hausman Declaration, ¶ 37.

APPENDIX A

Declaration of Professor Jerry A. Hausman

Declaration of Professor Jerry A. Hausman

1. My name is Jerry A. Hausman. I am MacDonald Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139.

2. I received an A.B. degree from Brown University and a B.Phil. and D. Phil. (Ph.D.) in Economics from Oxford University where I was a Marshall Scholar. My academic and research specialties are econometrics, the use of statistical models and techniques on economic data, and microeconomics, the study of consumer behavior and the behavior of firms. I teach a course in "Competition in Telecommunications" to graduate students in economics and business at MIT each year. Internet competition, service provision by cable providers, the effect of competition to cable providers, and competition among ILECs and CLECs are a few of the primary topics covered in the course. In December 1985, I received the John Bates Clark Award of the American Economic Association for the most "significant contributions to economics" by an economist under forty years of age. I have received numerous other academic and economic society awards. My curriculum vitae is included as Exhibit 1.

3. I have done significant amounts of research in the telecommunications industry. I have published numerous papers in academic journals and books about telecommunications. I have also edited two books on telecommunications, Future Competition in Telecommunications (Harvard Business School Press, 1989) and Globalization, Technology and Competition in Telecommunications (Harvard Business School Press, 1993). Two of my recent papers in telecommunications are: "Valuation and the Effect of Regulation on New Services in Telecommunications," Brookings Papers on Economic Activity: Microeconomics, 1997 and J. Hausman and H. Shelanski, Economic Welfare and Telecommunications Welfare: The E-Rate Policy for Universal Service Subsidies," Yale Journal on Regulation , 1999.

4. I am familiar with the cable industry and direct broadcast satellite (DBS) industry. I first did research on DBS in the early 1980's when I served as a consultant to Sears and Comsat on the commercial viability of DBS. I have continued to follow the DBS industry since that time. I have also studied DBS and cable competition in the United Kingdom and DBS in Australia. I have previously submitted Declarations to the Commission on behalf of DirecTV regarding the competitive impacts of policies affecting DBS. I have also made presentations to the DOJ regarding competition in the cable industry in the U.S.

I. Summary and Conclusions

5. Cable MSOs have significant market (monopoly) power. Since cable MSOs are largely unregulated, they charge consumers prices above competitive levels. The merger of AT&T/TCI (AT&T) with Media One will unite two of the top three cable companies. Direct Broadcast Satellite (DBS) places only a small constraining factor on cable.

6. The merger will increase the probability that the combined company will harm consumers in new ways in addition to the current pattern of charging supra-competitive prices. By exercising monopsony power, the combined company can create decreased programming choices for consumers, decreased quality of programming for consumers, and higher costs and prices for competing services such as DBS. The combined company will also be more likely to use its market power to affect competition adversely in the market for set top boxes and programming guides.

7. The ability of the Internet to provide future competition to cable is especially important given AT&T's repeated attempts to cause the Commission to adopt regulations that decrease the economic incentives and make it more difficult for ILECs to invest in broadband capacity. AT&T's attempted anti-competitive use of regulation to hamper

future competition demonstrates that AT&T will expend significant resources to maintain its largely unregulated ability to exercise market power in cable.[1]

II. Cables MSOs Have and Exercise Significant Market Power

8. Market power is defined as the ability to price above competitive levels for a significant amount of time.[2] Most economists who have considered the issue, the DOJ, the FCC, and the GAO have concluded that cable MSOs have significant market power.[3] When a new entrant comes into a local cable market by overbuilding, prices typically decrease by 10%-20%, which provides significant evidence of the exercise of market power. Thus, regardless of the market definition one uses, cable MSOs are charging prices above competitive prices because when wireline cable competition appears, prices of the incumbent cable provider decline significantly. Indeed, the latest data from the Commission demonstrates the price gap between cable systems that face head-to-head overbuild competition compared to cable systems that do not face "effective competition" has increased over the period July 1, 1997 to July 1, 1998.[4] Price increases during this period were also higher for the "noncompetitive group" of cable operators.

9. The Commission has typically analyzed competition within a market defined as the multichannel video programming distributors (MVPD) market. Using this market definition, cable still accounts for approximately 85% or the market despite the presence of DBS and other forms of wireless MVPD offerings that have existed for a number of

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[1] FCC rate regulation of cable ended on March 31, 1999.

[2] See DOJ and FTC Horizontal Merger Guidelines (MG), 1992. Similar definitions are used in economics textbooks, e.g. D.W. Carlton and J.M. Perloff, Modern Industrial Organization, Scott, Foresman, 1990, p. 8 and in legal articles, e.g. W. Landes and R. Posner, "Market Power in Antitrust Cases", Harvard Law Review, 94, 1981, p. 937. Economists (and many legal decisions) tend to use the terms monopoly power and market power interchangeably with the above definition. I will use the two terms in this way.

[3] The recent GAO Report: "The Changing Status of Competition to Cable Television", July 1999, concludes "The cable industry maintains a high share of the subscription television market nationally and is currently not very competitive." (p. 1, also p. 9). The Commission determined in June 1998 that cable operators did not face "effective competition". See "Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices", 12 CR 531, 63 FR 38089, 1998, ¶ 88.

[4] FCC, Report on Cable Industry Prices (FCC Survey), MM Docket No. 92-266, May 5, 1999, ¶ 4.

years.[5] Furthermore, MVPD markets are local geographic markets because MVPD (cable) operators will not divert their supply of programming to an adjacent geographic market in response to a price increase by the incumbent MVPD supplier. Additionally, significant barriers to entry exist for MVPD markets because of the substantial costs involved in market entry.[6] Moreover, market data demonstrate that DBS and other potential multichannel substitutes to cable are not effectively constraining the price of cable in local markets.

(1) The price of DBS decreased significantly in 1998 (Report ¶ 73) but the price of cable increased significantly (Report ¶ 47).[7] The recently released FCC Survey (¶¶ 5-6) and the CPI for cable both demonstrate significant price increases for cable.

(2) Overbuilding by new cable entrants leads to a significant decrease in price as I discussed above. Since DBS providers are national in scope, these price decreases demonstrates the lack of an effective price constraint by DBS.[8] Indeed, the "overbuild gap" has increased over the past year according to the FCC Survey.

(3) DBS is hampered by a lack of local stations and high upfront costs (in some situations). These factors are discussed in my academic research and in the Report, ¶ 11, ¶ 63.[9] Contrary to AT&T's claim in its

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[5] See FCC "Fifth Annual Report on Cable", December 17, 1998 (Report), ¶ 154.

[6] For a discussion of the importance of sunk costs in creating barriers to entry, see MG Section 3.

[7] The Report ascribes much of the price increase in cable to increases in programming costs, especially sports programming. However, the Report fails to note that DBS providers face similar increases in programming costs since they also carry ESPN and similar programming. The Report gives no explanation for this disparity in price movements given a large proportion of common input costs from programming. The GAO Report also finds decreasing (real) prices. (p. 14)

[8] See also the "Price Survey Report", Report, p. F-3, fn. 18 where the FCC reports that prices are 12.5% higher where no wireline MVPD competition exists compared to competitive areas.

[9] See J. Hausman, Individual Discount Rates and the Purchase and Utilization of Energy Using Durables," Bell Journal of Economics, Spring 1979, for a discussion of why high upfront costs tend to discourage consumer purchases.

> Applications that the lack of local stations for DBS will cease to be a problem, today DBS not only does not televise local stations, but also DBS is not allowed to carry popular network shows. While Congress may act to alleviate the problem it is unlikely that DBS will have the capacity to carry sufficient local stations to compete closely with cable along this dimension.
>
> (4) The Commission Report discusses that for most consumers, DBS is not a close substitute to cable, Report ¶ 63. It does not appear that sufficient marginal customers exist for DBS to constrain cable prices, since the price of cable decreases significantly when a new wireline MVPD provider enters.[10]

Thus, using the DOJ and FTC Merger Guidelines (MG) (1992) market definition approach that the Commission has used in prior decisions, suppose that two cable providers (one being an overbuilder) are providing cable service at competitive prices. Using the MG approach, a hypothetical unregulated monopolist cable provider who controlled the prices of both of the two cable providers could increase prices by 5% since the data demonstrate that the presence of overbuilt wireline cable networks lead to lower prices of 12-20%. The price data which demonstrates that the presence of a wireline overbuilder leads to decreased prices of 12%-20% introduce significant doubts whether the MVPD market definition is appropriate. However, within the MVPD market definition the price data demonstrate that DBS and other wireless services are not constraining the price of cable to competitive levels.

10. The market power of cable MSOs in local markets is unregulated in most important respects. The Commission has many years of experience in regulating telephone companies, most of which are highly regulated with respect to their prices and

non-discrimination rules. To the contrary, cable MSOs have no price regulation and they have consistently increased their prices to well above competitive levels.[11] Furthermore, cable companies actively discriminate, e.g. in their refusal to allow non-affiliated ISPs to access their broadband capacity. The proposed merger will likely allow the extension of this unregulated market power to additional markets. Consumers will be further injured by the merger as they currently are by the exercise of market power by cable companies. As I have stated in my academic research and in previous submissions to the Commission, consumer welfare should be the foundation of the public interest test used by the Commission.[12]

11. The combination of TCI/AT&T (AT&T) and Media One will give AT&T direct control over approximately 29% of all multi-channel video programming (MVPD) customer subscribers according to the recent Commission Report.[13] Thus, the number one cable MSO would be merging with the number 3 cable MSO with a change in the HHI of approximate 296 (2*22.8*6.5). This number far exceeds allowable Merger Guidelines safe harbors, so a "competitive effects" analysis would be required as called for in Section II of the MG .[14] Even with reasonable changes in the shares, the resulting change in the HHI will continue to far exceed MG safe harbors.

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[10] The recent GAO Report, op. cit., notes that DBS has enjoyed much greater penetration in more rural states. (p. 11) Since cable subscription prices are set on a local basis, this finding means than more urban cable systems face less competition and can exercise a greater degree of market power.

[11] My understanding is that cable rate regulation has expired on March 31, 1999. When the regulation was in place, cable MSOs regularly increased their prices at 3-4 times the rate of inflation as discussed in the Report (Dec. 1998 Report and prior Reports).

[12] See e.g. J. Hausman, Taxation By Telecommunications Regulation," Tax Policy and the Economy, 12, 1998 and J. Hausman and H. Shelanski, Economic Welfare and Telecommunications Welfare: The E-Rate Policy for Universal Service Subsidies," Yale Journal on Regulation , 1999.

[13] The FCC Report specifies a total MVPD market of 76.6 M subscribers. AT&T has direct control over 17.3 M subscribers (AT&T's total attributable subscribers (21.8 M) minus subscribers of Cablevision systems (3.1 M) and two AT&T-Time Warner cable joint ventures (1.4 M)) or 17.3/76.6 MVPD subscribers = 0.228. MediaOne has direct control over 4.97 M subscribers or 4.97/76.6 MVPD subscribers = 0.065. Thus, the total is a 0.293 share.

[14] The share calculation and HHI calculation are likely to be too low because, as I demonstrated above, DBS does not provide an effective competitive constraint on cable. A method to adjust the HHI calculations which takes account of the non-homogeneous product nature of cable and DBS using cross-price elasticities is J. Hausman, G. Leonard, and J.D. Zona, "A Proposed Method for Analyzing Competition Among Differentiated Products," Antitrust Law Journal, 60, 1992

12. Direct control is likely not the proper concept for considering the competitive effects of the proposed merger. In terms of cable homes passed, including Media One's partnership interest in Time Warner Entertainment, and AT&T's other attributable interests, the combined company would have a share of approximately 62%-65%.[15] The change in the HHI is approximately 1851, again far beyond MG safe harbors. Using the MVPD market definition, the total market share is approximately 48%-50%.[16] Using the MVPD market definition, the change in the HHI is approximately 1092, again far beyond MG safe harbors. Given that the economic interests of cable MSOs coincide on many economic issues, such as achieving low programming costs from third party providers, direct control is not required for cable MSOs to decide jointly to bargain together, or at least to take similar negotiating positions when bargaining with outside suppliers.[17] Thus, affiliated cable MSOs should be considered in the competitive analysis of the merger, rather than limiting the analysis only to cable MSOs that are directly controlled by the merged company.[18] Economic analysis demonstrates that given the commonality of

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[15] The FCC Report reports total cable homes passed as 95.1 MM. The Application specifies that AT&T has attributable interests in systems passing 35.2 MM homes. The Application details that MediaOne has attributable interests in systems passing 26.5 MM homes. Excluding 2.7 MM double-counted homes, AT&T post-merger would pass approximately 59 MM homes or 62% of homes passed nationwide. The estimate would increase to 62 MM homes or 65% of homes passed nationwide if I include 3.1 million homes passed by Time Warner Inc.'s systems apparently managed by Time Warner Entertainment. Additional affiliations (which I do not use in my share calculations) will arise from further agreements with Bresnan Communications, Falcon Cable TV, Insight Communications, Intermedia Partners, Peak Communications and a proposed joint venture with Comcast.

[16] The Application specifies AT&T's total attributable subscribers as 21.8 M or 21.8/76.6 = 0.285. The Application details MediaOne's total attributable subscribers as 16.1 M or 16.1/76.6 = 0.21. Elimination of possible double counting reduces the combined share from 49% to 48%. MediaOne's attributable interest in Time Warner Inc.'s cable systems would increase the combined entity's share of the MVPD market to 50%.

[17] The analysis of factors that limit coordinated interaction in Section 2 of the MG does not apply here because cable MSOs do not compete with each other in purchasing programming from unaffiliated third party providers. Thus, the usual economic incentive exists to cheat on agreements is largely absent. Rather an economic incentive exists to bargain in a coordinated manner.

[18] AT&T claims that the merged companies will provide service to only 31% of cable homes passed or 26.6% of MVPD subscribers. See "Applications and Public Interest Statement", July 7, 1999 (Applications), p. 55. AT&T provides no economic basis for changing the attribution rules used by the Commission nor does it substantiate its larger estimate of homes passed by cable nationwide, compared to usual statistics used by the industry. (Applications, p. 63, fn. 153)

interests, affiliated companies will act in a coordinated manner with the merged company in many of the economic decisions they make.[19]

III. Likely Anticompetitive Effects from the Merger

13. I first consider the effect of the merger in the market for video programming. Video programming forms a separate product market that has a national geographic scope. Video programmers earn revenues from two sources: subscription fees paid by cable MSOs and advertising revenue. Possible anti-competitive effects in this market will lead to lower quality programming for consumers, reduced choice of programming to consumers, and possible higher MVPD prices to consumers. I consider each separate effect on consumers.

A. Exercise of Monopsony Power

14. Monopsony power is the ability of a buyer to require sellers of inputs to accept prices below the competitive price.[20] Monopsony power typically occurs because sufficient alternative buyers do not exist for the seller's product if the monopsonist refuses to buy the product. The proposed merger will likely lead to the exercise of monopsony power in the purchase of programming. This outcome can harm consumers by reducing programming quality and raising prices.

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[19] AT&T claims that a 35% share is required for monopsony power. This claim is misplaced. The MG state that, "In order to assess potential monopsony concerns, the Agency will apply an analytical framework analogous to the framework of these Guidelines." MG ¶ 0.1. The MG use a 35% share in assessing the lessening of competition through unilateral effects, ¶ 2.211, but the MG also consider the lessening of competition including the exercise of monopsony power by "a coordinating group of buyers" (MG ¶ 0.1), and no particular market share is required for the lessening of competition through coordinated interaction. Indeed, as I discuss below, one or two large cable companies can exert market power, especially when they act in a coordinated manner.

For example, the Federal Trade Commission recently found that ToysRUs, which sells about 20% of the toys sold in the U.S., had market power as a purchaser of toys. *In the Matter of Toys 'R' US, Inc., a corporation,* Docket No. 9278 (FTC Order) (Oct. 12, 1998).

[20] Thus, monopsony power is similar in concept to monopoly power, except the effect is in terms of the input prices, rather than output prices. Economic textbooks discuss monopsony power. See e.g. Carlton and Perloff, op. cit., pp. 114-117.

15. The vast majority of cable channels are national in scope.[21] Existing cable channels, and especially new cable channels, must have sufficient subscribers to attract advertising revenue to help pay for content generation. Advertising is an important source of revenue for cable channels since 60% of revenues come from advertising (Report ¶ 188). Cable subscribers have very little choice regarding their available programming because the MSO determines what channels to carry, which programming tiers to place channels on, and almost no a la carte choices are available (apart from premium channels, which typically do not have advertising). The only alternative for a cable subscriber is to change to DBS, but as the analysis above demonstrates, this alternative does not place a significant restraint on cable MSO behavior.

16. Furthermore, most advertisers will pay increasing amounts for additional increments of customers. This non-linear relationship of advertising to "share of available viewers" has existed for many years in both over the air and cable programming. If a large cable MSO can credibly threaten to deny access for a given cable channel to a significant proportion of customers by either not carrying the channel or putting it on a less widely-viewed (higher price) programming tier, the cable channel will realize that its ability to earn revenue from advertisers will be affected significantly. The cable channel will then need to choose to either forgo the additional advertising revenues or accept a lower price from the cable MSO. This "leverage" allows the exercise of monoposy power by a cable MSO, if the cable MSO is of sufficient size to significantly affect the advertising revenues of the cable channel.

17. If a cable channel receives below the competitive price for its programming or receives lower advertising revenues, it will have an economic incentive to decrease the quality of its product and spend less on content creation.[22] This result follows from the

[21] The primary exception are cable news channels and regional sport networks.

[22] AT&T in its Applications focuses on possible vertical foreclosure of cable channels. (e.g. Applications, p. 56, pp. 59-60) However, it does not discuss the outcome of lower quality programming because of decreased revenues to the cable channel. Lower quality causes loss of consumer welfare since it is similar to a higher price (holding quality constant) for a product.

lower economic return a cable channel would receive from the marginal expenditure to increase its program quality. These same considerations can affect entry decisions by marginal cable channel entrants, but these effects are not as potentially important given the discrete nature of cable channel entry. Decreased quality of programming or decreased choice leads to lower consumer welfare. Thus, exercise of monoposony power by the merged company is anti-competitive and leads to consumer harm.

18. The Commission has recognized the potential problem of monopsony behavior, Report ¶¶ 152ff.[23] The Report states that buyer concentration can have anticompetitive effects on the supply of programming to MVPDs. The Commission also states that monopsony power can reduce the diversity of content available to consumers. However, the Commission states in the Report that no single MSO or pair of MSOs control a large enough share of cable subscribers to be able to block entry by a new programmer.

19. I disagree with this conclusion. The FCC Report fails to recognize that most economic decisions are made at the margin. Thus cable channels in deciding on their content will need to decide whether a marginal increase in expenditure on content will be worthwhile. If their economic return is lower than the competitive level because the subscription rates are depressed below competitive levels or they have fewer potential viewers that advertisers want to reach, they will produce lower quality programming. If the effect is large enough, a marginal entrant may decide to forgo entry altogether. But even if entry were not affected, program quality decisions are affected by these marginal considerations, which the Commission Report does not fully recognize. Both results, lower quality programming or decreased choices for consumers, lead to harm to

[23] The Commission has previous recognized that even low market concentration in cable can lead to the exercise of monopsony power: "Congress concluded that the degree of concentration, though low relative to other industries, may enable some MSOs to exercise excessive market power, or monopsony power, in the program acquisition market". (FCC 1993 Cable Ownership Order, ¶ 10). This finding was made when TCI was independent, before the proposed transaction with the third largest cable MSO.

consumers from the decrease in consumer welfare.[24] Furthermore, the 1999 GAO Report also disagrees with the FCC Report's conclusion. The GAO Report states that a "subscription network needs its product to be carried by at least one of the two largest cable companies to be economically viable—thus creating a dependence on the large cable companies and giving them significant influence over the subscription network." (p. 22)[25]

B. Holdup Effects from Possible Exclusion or Foreclosure

20. An additional anticompetitive effect can occur. A large MSO, through its power of exclusion, can demand an ex post share (holdup) in successful cable packages. This share can be considered similar to a tax on successful programming where the right hand tail of the distribution of returns is truncated. Since programming has a high proportion of sunk costs, where assets cannot be shifted to other uses economically, the tax will lead to a reduction in investment and lower quality cable offerings.[26] This lower quality outcome is anti-competitive and harms consumers.

21. Furthermore, the incidence of the "monopsony tax" will be on the programmers who will be unable to shift it forward to some other group. That is, a proportion of the potential revenue to the successful programmer will be captured as a tax by the cable MSO. Indeed, I am aware that TCI exercised this type of monopsony power in the early 1990s against Viacom and other cable programmers. Viacom brought suit against TCI partly on these grounds and alleged that TCI had used its power against the Discovery/Learning Channels to demand a stake in their successful products.[27] Nor does a cable MSO necessarily need to be as large (contrary to the Report) as the combination

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[24] Indeed, similar potential anticompetitive effects were present that led to the Time Warner Consent Decree when Time Warner purchased Turner Broadcasting System in 1997. The FTC Complaint (Docket No. C-3709, p. 9) stated that Time Warner had direct financial incentives "not to carry other Cable Television Programming Services that directly compete with the Turner Cable Television Programming Services." A similar claim was made with respect to TCI.

[25] The 1999 GAO Report went on to find "that program suppliers that are not vertically integrated (such as MTV, A&E Network, and the Weather Channel) may be very dependent on large cable companies." (p. 22)

[26] I have discussed this truncation effect on investment in telecommunications where a significant proportion of investment costs are sunk in J. Hausman, "Valuation and the Effect of Regulation on New Services in Telecommunications," Brookings Papers on Economic Activity: Microeconomics, 1997.

of AT&T and Media One to use its market power. Certain "strategic MSOs" can exercise market power in their local markets. An example of this was the exclusion by Time Warner of Fox News in New York City in 1997 until Fox agreed to certain demands made by Time Warner.

22. The merged company will be more than large enough to exercise this type of monopsony power. In terms of direct control, approximately 29% of MVPD consumers will subscribe to the merged entity's cable MSOs. In terms of associated ownership interests, the shares are between 48%-65%. This amount of potential control over buying decisions for cable programming content would allow significant anticompetitive actions to succeed. This potential outcome particularly warrants Commission attention because TCI has exercised monopsony power in the past to distort competition.

C. Monopsony Power Used in Conjunction with Vertical Integration

23. A large cable MSO has an additional economic incentive and ability to exercise monopsony power when it is vertically integrated into programming. The addition of vertical integration into programming increases the economic return to the exercise of monopsony power so that the cable MSO will tend to exercise monopsony power beyond the point of a nonintegrated cable MSO. The exercise of monopsony power by a vertically integrated cable MSO can allow the vertically integrated company to charge higher subscription fees for its own programming to non-affiliated cable MSOs because of reduced programming competition.[28] Thus, the vertically integrated company pays a lower price for programming it buys from third parties and is able to charge a higher price for its programming because of the lower quality of the competing programming. Also, the vertically integrated company can charge higher fees to advertisers, because advertisers will have fewer competing programs (with viewers) to choose from. Thus, the distortion to competition can be significantly greater in the

[27] The suit subsequently settled with a non-public agreement.

[28] The FTC used this potential anticompetitive effect as the one of the bases for their complaint in the Time Warner Purchase of Turner Broadcasting System in 1997. See the FTC Complaint (Docket No. C-3709, p. 9) and the discussion above in fn. 22.

presence of vertical integration by cable MSOs that have basically unregulated market power.[29]

24. AT&T holds a 100% equity interest in Liberty Media Group, a very large producer of and distributor of video programming. AT&T/TCI has a significant financial interest in 15 of the top 50 cable channels by subscribership (Report, Table D6). AT&T also has an ownership interest in 28% (67 of 242) of all national programming services. This percentage has increased from 23% over the past few years (Report ¶ 163). Thus, AT&T has an economic incentive to decrease competition from other cable channels because they compete for subscribers and advertising dollars. Advertising is very important since 60% of revenues come from advertising (Report ¶ 188). The "monopsony tax" discussed above decreases competition, and the size of the monoposony tax levied by a cable MSO will increase with vertical integration.

25. The increase in monopsony power that would result if AT&T were allowed to acquire Media One would allow AT&T to increase the monopsony tax. Media One also has additional programming assets, which would increase the return to AT&T from the exercise of monopsony power. These programming assets include The Food Network, Style!, Preview Travel, Sportsline USA, Speed Vision, Outdoor Life, and regional networks. Media One also owns a 25% interest in TW/Turner programming (Report ¶ 165), which further increases the economic incentive to harm other channels. Thus, the merger will increase AT&T's ability to exercise monopsony power by increasing the number of its cable subscribers, and increase AT&T's incentives to harm competing cable programming because of Media One's programming interests.

26. By AT&T and Media One not carrying a channel (in some locations) or by placing the channel on a more expensive and less-watched programming tier, the channel will have less incentive to spend money on better content and will be less competitive to

[29] Since market power can be exercised on both the output side (to residential customers) and on the input side (to programmers), the "one monopoly" theory does not apply.

AT&T channels overall on other companies' MSOs and on AT&T MSOs where the channels are carried. A similar outcome will result if AT&T and Media One pay below competitive subscription fees to a given cable network channel. The result will be reduced competition among cable channels, lower quality of content for viewers, and potentially increased advertising costs. Another result will be the ability of AT&T to charge higher fees to other MSOs for cable programs because of reduced competition. Prices to these MSO subscribers will subsequently be higher because economic analysis demonstrates that when costs increase to a firm with market power, the firm will increase its prices to consumers. Thus, consumer harm will arise from lower quality programming, reduced choice, and higher monthly cable fees to non-affiliated cable MSO customers because of the higher subscription fees that the vertically integrated company can charge for its own programming.

D. Exercise of Monopsony and Monopoly Power in Electronic Programming Guides

27. Electronic programming guides (EPGs) are a relevant product market that is national in geographic scope. Current significant market participants include the AT&T-affiliated EPG, TV Guide, and various independent EPGs, not affiliated with MVPDs. AT&T owns 44% (co-equal with News Corp.) of TV Guide, which provides an EPG.[30] The incentive and ability to exercise monopsony power with respect to EPGs or to weaken and to exclude competition for non-affiliated MSOs is similar to the situation for programming that I discussed above. Because of its vertical integration into EPGs, AT&T will have an increased economic incentive and the ability to weaken competing EPGs so that it can exercise market power in the market for EPGs. Given its market position, AT&T will be able to restrict the availability of competitive EPG services by discriminating in favor of its affiliated EPG and against competing EPG providers by denying carriage to those competitors and stripping the competitors' signals out of the

[30] Source: TV Guide 10Q filed with the SEC for the quarter ending March 31, 1999. AT&T and News Corp. control 98% of the voting power of the common stock of TV Guide.

vertical blanking interval (VBI). The effect of these strategies will increase with the acquisition of Media One so that competition will be reduced by the merger.

28. While the future is difficult to forecast here, EPGs could become a critical competitive element as the interface between consumers and MVPDs for both video programming and Internet services. EPGs could function similarly to a browser for a set-top box "computer" that uses the television set as a monitor. Given its ownership stake in Excite @Home and Road Runner and its extensive cable holdings, the merged company would have the incentive and ability to steer customers to its affiliated video programming and Internet services. AT&T's EPG also would be similar to a portal for the TV and Internet combined, similar to Yahoo today, that aggregates and organizes content. AT&T, by controlling the EPG, can exercise monopoly and monoposony power against other cable TV content providers. AT&T will have the economic incentive to exercise this power, which will increase if the merger is allowed, given its large economic interest in Liberty Media and other cable TV content providers.

29. This "bias" in the use of EPGs would be somewhat similar to complaints brought in the 1980s by the DOJ against airlines that used their screen-based reservation systems to steer customers toward their own flights. However, the effect could be significantly greater here because travel agents had the economic incentive and the expertise to choose the best flight for their customers or their customers would switch to competing travel agents. Here many viewers would lack the necessary expertise to counteract program bias contained in EPGs. Furthermore, effective competition does not exist between cable MSOs and DBS, as I discussed above.

30. Thus, AT&T can exercise monopsony power in EPGs, and it may also be able to exercise monopoly power in EPGs. The exercise of this market power is likely to also spill over to the programming market. Consumers will be harmed because they will receive lower quality and less choice of EPGs, higher prices for EPGs, and similar effects in terms of MVPD programming.

E. Exercise of Monopsony and Monopoly Power in Set-top Boxes

31. Set-top boxes form a relevant product market, which is national in geographical scope. Major set-top manufacturers include General Instrument (GI) and Scientific Atlanta. GI is the largest manufacturer of digital set-top boxes with an estimated market share of 65%, or over two times larger than Scientific Atlanta.[31] Cable MSOs are the major purchasers and vendors of set-top boxes.[32] The Commission has previously stated that cable set-top boxes could be the critical gateway for a broad array of video, data, voice, and home automation services.

32. AT&T will have potential monopsony power given its large share of all cable households, either through direct or indirect control. The merged company will be able to exercise monopsony power to affect competition in the set-top box market. Furthermore, AT&T currently owns, through Liberty Media, 21.4 million shares or approximately 12.2% of General Instruments.[33] General Instrument has announced that Liberty Media (AT&T) has agreed to purchase an addition 10 million General Instrument shares, which will raise its ownership share to approximately 20% of GI.[34] Liberty Media will be, by far, the largest shareholder in GI after the purchase is completed. This large ownership stake in General Instrument creates a further incentive for the merged company to distort competition because of the vertical integration of AT&T into set-top boxes. AT&T may well be able to translate its monopsony power in set-top boxes to monopoly power in set-top boxes by this distortion of competition.

33. Also, the merged company may well be able to distort standards and impede the development of open and competing industry standards, which would allow the exercise of monopoly power. A non-open standard that favors AT&T and its affiliates

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[31] Source: http:/ /www.forbes.com/forbes/99/0503/6309214a.htm, May 3, 1999 and http:/ /www.forbes.com/forbes/99/0208/6303053a.htm, Feb. 8, 1999.

[32] Under recently adopted Commission regulations, consumers will not begin to purchase set-top boxes for at least 2-3 years. See "Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices", 12 CR 531, 63 FR 38089, 1998.

[33] Source: General Instrument, Form 10Q filed with the SEC for the quarter ending March 31, 1999. The AT&T Applications lists the market share as 13%, fn. 31, p. 12.

could well lead to problems that existed with pre-divestiture AT&T's relationship with its manufacturing arm, Western Electric.[35] The potential importance of open standards and competition in set-top boxes is emphasized by General Instrument's description of its set-top boxes as "providing the user a gateway to interactive services such as VOD (video on demand), Internet Access, Email, Home Shopping, and more."[36] The combination of the largest cable MSO with the largest manufacturer of set-top boxes in a situation where technology is rapidly changing permits the anticompetitive use of standards to distort competition and to harm consumers.

34. Consumer harm would result because of decreased choice and higher prices for set-top boxes. Distortion of standards could lead to distortion of competition in Internet Access, home shopping, and other markets. To the extent that set-top boxes become the critical "gateway" to these interactive services as General Instrument predicts, AT&T control could lead to significant consumer harm in these downstream markets.

IV. Consumer Welfare vs. Competitor Welfare: The Public Interest Test

35. The Commission has the ability to increase consumer welfare, which I consider to be the public interest test.[37] Consumer welfare is well-defined in economics, and measurement of consumer welfare (consumer surplus) uses agreed upon techniques that I (and many others) have long used in previous academic research.[38] If the proposed transaction is allowed to proceed, consumers will pay higher prices, have less choice of cable content, receive lower quality cable content, and continue to suffer from the

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[34] Source: http:/ /www.gi.com/PRESS/CURRENTNEWS/repurchase 040599.html, April 5, 1999.

[35] This possibility has already received comment within the industry. In a recent analysis the effect of AT&T was described, "In the cable industry, at least, AT&T's choice of hardware and software could become a de-facto standard....Where AT&T goes, other cable operators are sure to follow, say industry insiders." (Jim Davis, "Rivalries, technologies confuse set-top market", June 17, 1999, available on http://www.news.com/News/Item/0,4,37973,00.html)

[36] Source: http://gicout60.gic.gi.com:81/GIHomepa.nsf/?Open

[37] See e.g. J. Hausman, Taxation By Telecommunications Regulation," Tax Policy and the Economy, 12, 1998 and J. Hausman and H. Shelanski, Economic Welfare and Telecommunications Welfare: The E-Rate Policy for Universal Service Subsidies," Yale Journal on Regulation , 1999

exercise of unregulated cable monopoly power for the foreseeable future. All of these outcomes decrease consumer welfare.

36. AT&T claims it will not invest in its cable networks to provide local telephone competition unless the Commission protects AT&T from competition. I do not find AT&T's threat not to invest to be credible from an economic standpoint. AT&T has paid approximately a $40 billion premium to purchase TCI and Media One. Future monopoly cable profits and, to a large extent, future broadband Internet profits were already built into the pre-acquisition prices of these companies by stock market valuation. Thus, to earn the revenues associated with this $40 billion premium, AT&T must invest in local telephone competition. Otherwise, AT&T shareholders (the "widows and orphans" of stock market lore) will lose their $40 billion premium payment. If AT&T were to announce that it had decided not to proceed with its local telephone competition investment plan, AT&T stock would decrease almost immediately by about 25%. Thus, AT&T will be required by the stock market to compete in local telephone markets.[39] Otherwise, AT&T's shareholders lose the acquisition premium it paid, as well as a significant amount of its residential long distance revenue when the Commission allows the RBOCs to provide long distance competition.[40]

37. AT&T claims in its application that the merger will lead to a more rapid competitive response by the ILECs, which will create public interest benefits. (Application, p. 29) This claim is laughable given AT&T's continuing efforts with this Commission (successful to date) to decrease the incentives and the ability of ILECs to invest in upgraded networks. The Commission has recognized that the ILECs do not have market power in these advanced network features so that regulatory action is

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[38] Indeed, Commissioner Furchtgott-Roth has also used these techniques in his research. See R.W. Crandall and H. Furchtgott-Roth, Cable TV, Brookings Institution, 1996, Appendix B.

[39] Furthermore, Media One has stated that only a single digital upgrade is required to cover all services: "It costs approximately $400 per home passed to upgrade the network to 750 MHz. This basic upgrade makes the network ready to carry two-way services, including advanced video, high-speed data and telephone services." (1998 Media One Investor Handbook, p. 11) Thus, it would be economically irrational for AT&T not to proceed with upgrading its cable networks.

unnecessary and retards ILEC investment .[41] Yet, in the remand of the recent unbundling proceedings, AT&T claimed through its affiants that it should have access at TELRIC determined prices to all ILEC investment in advanced network facilities. As I have demonstrated numerous times, mandated access at below cost regulated prices discourages investment by ILECs.[42] AT&T is correct in one sense—unregulated monopoly profits do tend to create investment by hopeful competitors in unregulated markets. However, to the extent that AT&T continues to succeed in decreasing ILEC competition through this Commission's regulatory actions, normal market forces will continue to be frustrated. Consumer harm through the exercise of monopoly power by AT&T will continue, all against the public interest.

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[40] AT&T is reported to have about 60% of residential long distance traffic. See e.g. WSJ, Aug. 9, 1999.

[41] *See* Deployment of Wireline Services Offering Advanced Telecommunications Capability, Memorandum Opinion and Order and Notice of Proposed Rulemaking, CC Dkt. Nos. 98-147, 98-11, 98-26, 98-32, 98-15, 98-78, 98-91, 13 F.C.C. Rcd. 24,011, 24,055-59, ¶¶ 95-100 (1998)

[42] See e.g. J. Hausman, Valuation and the Effect of Regulation on New Services in Telecommunications," Brookings Papers on Economic Activity: Microeconomics, 1997; J Hausman, The Effect of Sunk Costs in Telecommunication Regulation," presented at Columbia University Conference, Oct. 1998, forthcoming in J. Alleman and E. Noam, ed., 1999, and J. Hausman and J.G. Sidak, "Affidavit in response to Second Further Notice of Proposed Rulemaking", CC Docket No. 96-98. I find it interesting that Professor William Baumol, a long time consultant and affiant for AT&T, has recognized in his paper, "Option Value Analysis and Telephone Access Charges", Oct. 1998, forthcoming in J. Alleman and E. Noam, ed., 1999, that the use of TELRIC omits a cost component in the investment decision so that the regulated prices based on total costs of such decisions are too low. Thus, TELRIC is inappropriate to use and will decrease the level of investment by ILECs. Nevertheless, AT&T continues to urge the Commission to use TELRIC to disadvantage its competitors.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on Aug 23, 1999

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Associate Editor, Journal of Public Economics, 1982-
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Director, MIT Telecommunications Economics Research Program, 1988-
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Member, Conference on Income and Wealth, National Bureau of Economic Research, 1992-

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